

X15642.NatlPhase.ST25.txt  
SEQUENCE LISTING

<110> Richard Dennis DiMarchi  
David Lee Smiley  
Lianshan Zhang

<120> MODIFIED GLUCAGON-LIKE PEPTIDE-1 ANALOGS

<130> X-15642 National Phase

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<170> PatentIn version 3.2

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Gln Ala Xaa Lys Xaa Phe Ile Xaa Trp Leu Xaa Xaa Gly Xaa Xaa Xaa
          20          25          30

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Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Gly Pro Xaa  
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Gln Ala Xaa Lys Xaa Phe Ile Xaa Trp Leu Xaa Lys Gly Arg Lys
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Gln Ala Xaa Lys Glu Phe Ile Ala Trp Leu Xaa Lys Gly Arg Lys  
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Gln Ala Xaa Lys Xaa Phe Ile Xaa Trp Leu Xaa Xaa Gly Xaa Xaa Xaa  
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Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
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Gln Ala Xaa Lys Glu Phe Ile Ala Trp Leu Xaa Xaa Gly Xaa Xaa Xaa  
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
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 1 5 10 15

Gln Ala Xaa Lys Glu Phe Ile Ala Trp Leu Xaa Lys Gly Gly Pro Xaa  
 20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 35 40

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Gln Ala Xaa Lys Xaa Phe Ile Xaa Trp Leu Xaa Xaa Gly Xaa Xaa Xaa  
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Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
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Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
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Gln Ala Xaa Lys Xaa Phe Ile Xaa Trp Leu Xaa Lys Gly Arg Xaa  
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His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
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Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly  
20 25 30

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<213> Artificial

<220>

<223> Synthetic construct

<400> 17

His Val Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Glu  
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Ile Lys Gly Gly Pro Ser  
20 25 30

Ser Gly Ala Pro Pro Pro Cys  
35

<210> 18  
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<220>  
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<220>  
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<222> (39)..(39)  
<223> 2,2'-dithiolbis(5-dinitropyridine) is attached to the thiol of  
Cys at position 39

<400> 18

His Val Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Glu  
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Ile Lys Gly Gly Pro Ser  
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Ser Gly Ala Pro Pro Pro Cys  
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<400> 19

His Val Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Glu  
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Ile Lys Gly Arg Gly Cys  
20 25 30

<210> 20  
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<213> Artificial

<220>  
<223> Synthetic construct

<220>  
<221> MOD\_RES  
<222> (32)..(32)  
<223> S-sulfonate (SS03) is attached to the thiol of Cys at position 32

&lt;400&gt; 20

His Val Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Glu  
 1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Ile Lys Gly Arg Gly Cys  
 20 25 30

&lt;210&gt; 21

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Synthetic construct

&lt;400&gt; 21

His Val Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Glu  
 1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Ile Lys Gly Arg Gly Lys  
 20 25 30

&lt;210&gt; 22

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Synthetic construct

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (32)..(32)

&lt;223&gt; [3-(2-pyridyldithio)propanamide]amide is attached to Lys at position 32

&lt;400&gt; 22

His Val Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Glu  
 1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Ile Lys Gly Arg Gly Lys  
 20 25 30

&lt;210&gt; 23

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Heloderma suspectum

&lt;220&gt;

&lt;221&gt; MISC\_FEATURE

&lt;222&gt; (1)..(39)

&lt;223&gt; Exendin-3

&lt;400&gt; 23

His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 Page 29

1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30

Ser Gly Ala Pro Pro Pro Ser  
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Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30

Ser Gly Ala Pro Pro Pro Ser  
35